work is progressive in character, so that "the later chapters will be intelligible to the beginner only if he has read the earlier."

The first twelve pages are devoted to a brief but admirable introduction, dealing with general principles. Following this come two chapters dealing with the several phyla from the Protozoa up to Man, and these are excellent, being lucidly written and bringing the essential characters of the several groups well to the front.

When the standard of excellence is so high it seems ungracious to suggest that improvements are still possible; but we venture to think that in a future edition the chapter on the Protozoa might be slightly extended, so as to give a little more space to the Mycetozoa and Hæmamœba, and allow of a reference to *Volvox* and *Pandorina*. We have failed to find any allusion to the remarkable absence of cilia in the Arthropoda, and would suggest that that portion of the chapter on Birds dealing with the vexed question of classification and the structure of the palate should be revised.

The significance of the cœlom has received special emphasis by the removal of the Platyhelminthes, Nemertines, Rotifera, and Nematoda to the end of the book, since in all these this organ is conspicuous by its absence. By such transference the authors have been enabled to trace a series of organisms, from the Cœlentera to Man, all of which possess in some form or other this particular organ. Having regard to the aims of this work, such a course can readily be justified.

The illustrations are very numerous, well selected, and unusually well executed.

Dragons of the Air. By H. G. Seeley, F.R.S. Methuen & Co., 36 Essex Street, W.C., London, 1901.

Prof. Seeley is admittedly one of the greatest authorities in all that concerns that ancient group of animals known as the Ornithosauria. For him these creatures have excited a quite peculiar interest, which has lasted throughout the whole of his long scientific career, and to-day he gives us, in a popular form, his conclusions concerning their origin, development, habits, and affinities, under the title of 'Dragons of the Air.'

A specially intimate knowledge of any given group of animals frequently leads the investigator to conceptions which run more or less counter to the generally accepted notions concerning that group; when this is the case, a serried array of well-marshalled facts is usually sufficient to oust the old ideas and establish the new, tradition being broken down by the force of the newly presented data.

Prof. Seeley's book is undoubtedly bristling with novelties, but we very seriously doubt whether he will succeed in making a single convert. The restorations, which are numerous, appear of themselves highly improbable, and we venture to doubt whether the arguments brought forward for their justification will carry conviction.

The question of the affinities of the group, somewhat obscurely set forth, is disappointing. No allowance seems to have been made for homoplastic characters, and as a consequence much has been allowed to rank as evidence that should have been eliminated as of no value when questions of kinship are concerned.

But, in spite of the drawbacks which we have pointed out, Prof. Seeley's book is extremely interesting, and one which is bound to command a large number of readers.

The work is profusely illustrated, for the most part with original drawings. Apart from the illustrations, to which we have already referred, we must take exception to figs. 17 and 18, neither of which is anything more than approximately correct, to say the least.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 6th, 1901.—J. J. H. Teall, Esq., M.A., V.P.R.S., President, in the Chair.

The following communication was read:—

'On the Clarke Collection of Fossil Plants from New South Wales.' By Edward Alexander Newell Arber, Esq., B.A.

This collection, numbering nearly 2600 specimens of all kinds, including some 80 fossil plant-remains, was presented to the Woodwardian Museum, Cambridge, in November 1844.

The following is the stratigraphical succession in New South Wales:—

4. Wianamatta & Hawkesbury Beds.
3. Newcastle Beds.
2. Marine or Muree Beds. { *c*. Upper Marine Beds. *b*. Lower Coal-Measures. *a*. Lower Marine Beds.
1. *Lepidodendron*-beds (Arowa &c.).

Four species from the Wianamatta Series are described, fourteen species (including one new one) from the Newcastle Series, and two from the Arowa Beds. Of the twelve new types described by McCoy *, five (namely, *Odontopteris microphylla*, *Sphenopteris plumosa*, *Glossopteris linearis*, *Phyllotheca ramosa*, and *Ph. Hookeri*) are no longer considered as such. One new type has been added.

The age of the beds is then discussed. Such evidence as the few plants in the Clarke Collection afford, supports Feistmantel's conclusion that the Wianamatta Beds are of Triassic age. *Thinnfeldia odontopteroides* occurs in Rhætic Beds in South America, and the identification of Rattee's *Salisburia palmata* with the American *Baiera multifida*, and a comparison with the Rhætic *Baiera Steinmanni* of Chile, is a new point in favour of this conclusion. The plants also support Feistmantel's opinion that the Newcastle Beds are equivalent to the Permian of Europe. The exact horizon and age of the Arowa Beds must for the present remain doubtful.

* Ann. & Mag. Nat. Hist. vol. xx. 1847.